



The Sewerage & Water Board

OF NEW ORLEANS

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July 11, 2024

Dear Mayor Cantrell, Honorable Members of the New Orleans City Council, and Orleans Parish Legislative Delegation:

This report is delivered in accordance which Revised Statute 33:4091, Section F, which states: *“In addition to the other requirements of this Section, the board shall send a report, by electronic mail, to the members of the Orleans Parish legislative delegation and the members of the governing authority of Orleans Parish detailing the pumping and electrical power of its facilities and the available manpower no later than twenty-four hours prior to a hurricane entering the Gulf of Mexico as determined by the National Weather Service and no later than forty-eight hours after a flood watch or warning or thunderstorm watch or warning is issued by the National Weather Service for any area of Orleans Parish.”*

Beginning at 12:30 PM on July 9th, 2024, a line of thunderstorms in two bands affected the New Orleans metropolitan area. A flash flood warning was issued at 6:30 PM, and the storm continued until just after 9 PM. Initial predictions from the National Weather Service called for storms lasting throughout the evening, with total rain accumulations between one and two inches. The status of SWBNO’s pumping and power equipment before and during the events is detailed below.

STORM IMPACTS

The storm began around 12:00 PM on July 9th, 2024. The first band lasted until lasted until 1 PM. The second band began around 5 PM and lasted until just after 9 PM, during which the highest rainfall rates were experienced in the Hollygrove, Lakeview, Mid-City, 7th Ward, and Gentilly Areas. The highest recorded accumulation was 4.14 inches at the Carrollton Water Plant. The average accumulation across SWBNO stations monitored was 1.42 inches, with the majority of rainfall accumulation experienced between 6pm and 8:30pm. The highest rainfall

intensity was observed at the Carrollton Water Plant at 5.64 inches/hour, where over 2.5 inches fell in an hour. The average rainfall intensity across the other stations monitored was 2.39 inches/hour. Rainfall rates of over 3-inch per hour were observed at multiple stations across the city, including DPS 1, 2, 4, 5, 6, 7, 12, and at the St Joseph Street building.

Note that data was not available from DPS 15, and only total collection amounts were available for DPS 3, 17 and 19. There were reports of flooding from several locations across the city by the Real Time Crime Center, which were resolved by 8:30pm, with the exception of the Carrollton/I-10 Underpass as noted below.

PUMPING AND POWER

Below is the status of SWBNO's pumping and power equipment at the outset of the event.

Drainage Pumps:

A total of 90 of 99 drainage pumps were reported in service at the outset of the event.

- DPS 6:** **I pump is out of service while inspection of pump is in progress to determine the extent of any repairs needed. RTS TBD.**
- DPS 10:** **No. 1 pump (60-hz) out of service. Vendor selected to refurbish pump. RTS August 2024.**
- DPS 13:** **No. 4 pump (diesel pump) is for emergency use only. Additional drainage funding is needed to move forward with repairs.**
- DPS 14:** **No. 3 and No. 4 pumps out of service due to mechanical issues. RTS pending contractor work required.**
Note that drainage from this area can also be addressed by DPS 10, DPS 16, and Dwyer DPS via the Morrison Canal.
- DPS 15:** **No. 1 pump gearbox repairs are in progress. RTS Q2 2025.**
- DPS 17:** **Pumps A & D (25-hz) out of service due to the issues with electric motor. RTS TBD, pending funding availability.**
- DPS 18:** **Pump No. 1 out of service as of May 2024. RTS pending further mechanical inspection.**
A portable pump was installed at this location as a temporary measure.

Underpass Stations:

At UPS Old Carrollton, the underpass pumps did not operate as expected. Two of the three pumps experienced electrical and mechanical issues, such that they ran intermittently, and the third did not operate. As a result, the underpass at Carrollton Ave and Interstate I-10 flooded and was impassable to vehicles for several hours. One pump was fixed that evening, and two pumps have been taken out of service for investigation and repairs. A portable pump was deployed to that location on July 10, 2024 as a temporary measure.

No issues reported with the other underpass pumps at the other locations.

Power:

Turbines 5 (25-hz), and 6 (60-hz), along with four frequency changers on the Eastbank, and one on the Westbank, as well as four EMDs were also available at the outset of this event.

Due to the limited amount of redundancy in 25-hz power, plans were made in advance of the rain event to utilize frequency changers for the stations which serve primarily 25-hz pumps.

A combination of Frequency Changers and T5 were used for this event, with no major issues encountered.

Unit*	Frequency	Capacity in MW	Available
T4	25 Hz	20 MW	0 (placed out of service on February 3, 2024)
T5**	25 Hz	20 MW	16 (revised capacity while Turbine 4 is out of service)
Carrollton Frequency Changers 1&2	Converts 60 to 25Hz	8.5 MW	8.5
Station D Frequency Changers 3&4	Converts 60 to 25Hz	12 MW	12

Unit*	Frequency	Capacity in MW	Available
West Bank Power Complex (Algiers Water Treatment Plant)	Converts 60 to 25Hz	2.5 MW	2.5
Five EMDs	25Hz	12.5 MW (total) 2.5 MW (each)	10 (repairs for EMD #1 in progress)
Plant Frequency Changer via T6	Converts 60 to 25Hz	3.75 MW	0 MW (RTS to be determined)
		Total 25 Hz:	49 MW
T6	60 Hz	22 MW	22 MW

*T3 has been decommissioned as of May 2021, and T1 has been decommissioned as of June 2022. Both units have been removed from this table.

STAFFING

Of New Orleans' 24 drainage pumping stations, some are staffed, some run remotely, and some are staffed as circumstances dictate. For this event, all stations were staffed appropriately.